

In the Claims:

This listing of claims shall replace all prior versions and listings of claims.

Claim 1 (original): An isolated nucleic acid molecule comprising a polynucleotide having a nucleotide sequence at least 95% identical to a sequence selected from the group consisting of:

- (a) a polynucleotide fragment of SEQ ID NO:X or a polynucleotide fragment of the cDNA sequence included in ATCC Deposit No:Z, which is hybridizable to SEQ ID NO:X;
- (b) a polynucleotide encoding a polypeptide fragment of SEQ ID NO:Y or a polypeptide fragment encoded by the cDNA sequence included in ATCC Deposit No:Z, which is hybridizable to SEQ ID NO:X;
- (c) a polynucleotide encoding a polypeptide domain of SEQ ID NO:Y or a polypeptide domain encoded by the cDNA sequence included in ATCC Deposit No:Z, which is hybridizable to SEQ ID NO:X;
- (d) a polynucleotide encoding a polypeptide epitope of SEQ ID NO:Y or a polypeptide epitope encoded by the cDNA sequence included in ATCC Deposit No:Z, which is hybridizable to SEQ ID NO:X;
- (e) a polynucleotide encoding a polypeptide of SEQ ID NO:Y or the cDNA sequence included in ATCC Deposit No:Z, which is hybridizable to SEQ ID NO:X, having biological activity;
- (f) a polynucleotide which is a variant of SEQ ID NO:X;
- (g) a polynucleotide which is an allelic variant of SEQ ID NO:X;
- (h) a polynucleotide which encodes a species homologue of the SEQ ID NO:Y;
- (i) a polynucleotide capable of hybridizing under stringent conditions to any one of the polynucleotides specified in (a)-(h), wherein said polynucleotide does not hybridize under stringent conditions to a nucleic acid molecule having a nucleotide sequence of only A residues or of only T residues.

Claims 2-12 (canceled)

Claim 13 (original): An isolated antibody that binds specifically to the isolated polypeptide of claim 11.

Claims 14-16 (canceled)

Claim 17 (original): A method for preventing, treating, or ameliorating a medical condition, comprising administering to a mammalian subject a therapeutically effective amount of the polypeptide of claim 11.

Claim 18 (original): A method for preventing, treating, or ameliorating a medical condition, comprising administering to a mammalian subject a therapeutically effective amount of the polynucleotide of claim 1.

Claim 19 (original): A method of diagnosing a pathological condition or a susceptibility to a pathological condition in a subject comprising:

- (a) determining the presence or absence of a mutation in the polynucleotide of claim 1; and
- (b) diagnosing a pathological condition or a susceptibility to a pathological condition based on the presence or absence of said mutation.

Claim 20 (original): A method of diagnosing a pathological condition or a susceptibility to a pathological condition in a subject comprising:

- (a) determining the presence or amount of expression of the polypeptide of claim 11 in a biological sample; and
- (b) diagnosing a pathological condition or a susceptibility to a pathological condition based on the presence or amount of expression of the polypeptide.

Claim 21 (original): A method for identifying a binding partner to the polypeptide of claim 11 comprising:

- (a) contacting the polypeptide of claim 11 with a binding partner; and
- (b) determining whether the binding partner effects an activity of the polypeptide.

Claim 22 (canceled)

Claim 23 (original): A method of identifying an activity in a biological assay, wherein the method comprises:

- (a) expressing SEQ ID NO:X in a cell;
- (b) isolating the supernatant;
- (c) detecting an activity in a biological assay; and
- (d) identifying the protein in the supernatant having the activity.

Claim 24 (original): The product produced by the method of claim 20.

Claim 25: (new): An isolated protein comprising amino acid residues 27 to 111 of SEQ ID NO:164.

Claim 26: (new): The isolated protein of claim 25 which comprises amino acid residues 2 to 111 of SEQ ID NO:164.

Claim 27: (new): The isolated protein of claim 25 which comprises amino acid residues 1 to 111 of SEQ ID NO:164.

Claim 28: (new): The protein of claim 25 which further comprises a heterologous polypeptide sequence.

A3
CD5+
Claim 29: (new): A composition comprising the protein of claim 25 and a pharmaceutically acceptable carrier.

Claim 30: (new): An isolated protein produced by the method comprising:
(a) expressing the protein of claim 25 by a cell; and
(b) recovering said protein.

Claim 31: (new): An isolated protein comprising the amino acid sequence of the secreted portion of the polypeptide encoded by the HHTLF25 cDNA contained in ATCC Deposit No. 209125.

Claim 32: (new): The isolated protein of claim 31 which comprises the amino acid sequence of the complete polypeptide encoded by the HHTLF25 cDNA contained in ATCC Deposit No. 209125, excepting the N-terminal methionine.

Claim 33: (new): The isolated protein of claim 31 which comprises the amino acid sequence of the complete polypeptide encoded by the HHTLF25 cDNA contained in ATCC Deposit No. 209125.

Claim 34: (new): The protein of claim 31 which further comprises a heterologous polypeptide sequence.

Claim 35: (new): A composition comprising the protein of claim 31 and a pharmaceutically acceptable carrier.

Claim 36: (new): An isolated protein produced by the method comprising:
(a) expressing the protein of claim 31 by a cell; and
(b) recovering said protein.

Claim 37: (new): An isolated protein comprising a polypeptide sequence which is at least 90% identical to amino acid residues 27 to 111 of SEQ ID NO:164.

Claim 38: (new): The isolated protein of claim 37, wherein said polypeptide sequence is at least 90% identical to amino acid residues 1 to 111 of SEQ ID NO:164.

A3
CDOT.
Claim 39: (new): The isolated protein of claim 37, wherein said polypeptide sequence is at least 95% identical to amino acid residues 27 to 111 of SEQ ID NO:164.

Claim 40: (new): The isolated protein of claim 37, wherein said polypeptide sequence is at least 95% identical to amino acid residues 1 to 111 of SEQ ID NO:164.

Claim 41: (new): The protein of claim 37 which further comprises a heterologous polypeptide sequence.

Claim 42: (new): A composition comprising the protein of claim 37 and a pharmaceutically acceptable carrier.

Claim 43: (new): An isolated protein produced by the method comprising:
(a) expressing the protein of claim 37 by a cell; and
(b) recovering said protein.

Claim 44: (new): An isolated protein comprising a polypeptide sequence which is at least 90% identical to the secreted portion of the polypeptide encoded by the HHTLF25 cDNA contained in ATCC Deposit No. 209125.

Claim 45: (new): The isolated protein of claim 44, wherein said polypeptide sequence is at least 90% identical to the complete polypeptide encoded by the HHTLF25 cDNA contained in ATCC Deposit No. 209125.

Claim 46: (new): The isolated protein of claim 44, wherein said polypeptide sequence is at least 95% identical to the secreted portion of the polypeptide encoded by the HHTLF25 cDNA contained in ATCC Deposit No. 209125.

Claim 47: (new): The isolated protein of claim 44, wherein said polypeptide sequence is at least 95% identical to the complete polypeptide encoded by the HHTLF25 cDNA contained in ATCC Deposit No. 209125.

A3
CDD^t. Claim 48: (new): The protein of claim 44 which further comprises a heterologous polypeptide sequence.

Claim 49: (new): A composition comprising the protein of claim 44 and a pharmaceutically acceptable carrier.

Claim 50: (new): An isolated protein produced by the method comprising:
(a) expressing the protein of claim 44 by a cell; and
(b) recovering said protein.

Claim 51: (new): An isolated protein consisting of at least 30 contiguous amino acid residues of amino acid residues 27 to 111 of SEQ ID NO:164.

Claim 52: (new): The isolated protein of claim 51 which consists of at least 50 contiguous amino acid residues of amino acid residues 27 to 111 of SEQ ID NO:164.

Claim 53: (new): The protein of claim 51 which further comprises a heterologous polypeptide sequence.

Claim 54: (new): A composition comprising the protein of claim 51 and a pharmaceutically acceptable carrier.

Claim 55: (new): An isolated protein produced by the method comprising:
(a) expressing the protein of claim 51 by a cell; and

(b) recovering said protein.

Claim 56: (new): An isolated protein consisting of at least 30 contiguous amino acid residues of the secreted portion of the polypeptide encoded by the HHTLF25 cDNA contained in ATCC Deposit No. 209125.

Claim 57: (new): The isolated protein of claim 56 which consists of at least 50 contiguous amino acid residues of the secreted portion of the polypeptide encoded by the HHTLF25 cDNA contained in ATCC Deposit No. 209125.

Claim 58: (new): The protein of claim 56 which further comprises a heterologous polypeptide sequence.

Claim 59: (new): A composition comprising the protein of claim 56 and pharmaceutically acceptable carrier.

A³
CDU.t
Claim 60: (new): An isolated protein produced by the method comprising:
(a) expressing the protein of claim 56 by a cell; and
(b) recovering said protein.

Claim 61: (new): An isolated protein consisting of at least 30 contiguous amino acid residues of amino acid residues 1 to 111 of SEQ ID NO:164.

Claim 62: (new): The isolated protein of claim 61 which consists of at least 50 contiguous amino acid residues of amino acid residues 1 to 111 of SEQ ID NO:164.

Claim 63: (new): The protein of claim 61 which further comprises a heterologous polypeptide sequence.

Claim 64: (new): A composition comprising the protein of claim 61 and a pharmaceutically acceptable carrier.

Claim 65: (new): An isolated protein produced by the method comprising:
(a) expressing the protein of claim 61 by a cell; and
(b) recovering said protein.

Claim 66: (new): An isolated protein consisting of at least 30 contiguous amino acid residues of the complete polypeptide encoded by the HHTLF25 cDNA contained in ATCC Deposit No. 209125.

Claim 67: (new): The isolated protein of claim 66 which consists of at least 50 contiguous amino acid residues of the complete polypeptide encoded by the HHTLF25 cDNA contained in ATCC Deposit No. 209125.

A3
CD34+
Claim 68: (new): The protein of claim 66 which further comprises a heterologous polypeptide sequence.

Claim 69: (new): A composition comprising the protein of claim 66 and pharmaceutically acceptable carrier.

Claim 70: (new): An isolated protein produced by the method comprising:
(a) expressing the protein of claim 66 by a cell; and
(b) recovering said protein.
